UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/051,474 | 01/18/2002 | Sundeep Chandhoke | 5150-54200 | 2749 |

35690 7590 07/21/2010

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

| EXAMINER | |
|---|---|
| PILLAI, NAMITHA | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2173 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 07/21/2010 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent_docketing@intprop.com
ptomhkkg@gmail.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

---

*Ex parte* SUNDEEP CHANDHOKE, NICOLAS VAZQUEZ,
DAVID W. FULLER, and CHRISTOPHER CIFRA

---

Appeal 2009-005257
Application 10/051,474
Technology Center 2100

---

Before ST. JOHN COURTENAY III, THU A. DANG, and
DEBRA K. STEPHENS, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1-3, 5-7, 11-23, 25, and 27-48. Claims 4,

---

[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

8-10, 24, and 26 have been cancelled. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We affirm-in-part.

## BACKGROUND

Appellants' invention is directed to graphically creating a sequence of motion control operations without requiring user programming. (Spec. 1).

Claim 1 is illustrative:

> 1. A computer-implemented method for creating a motion control sequence, the method comprising:
>
> displaying a graphical user interface that provides graphical user interface access to a set of motion control operations;
>
> receiving user input to the graphical user interface specifying a sequence of motion control operations;
>
> automatically generating a graphical program implementing the specified sequence of motion control operations, wherein automatically generating the graphical program comprises automatically including a plurality of nodes in the graphical program and automatically generating a plurality of connections between the nodes, wherein the interconnected nodes visually indicate functionality of the graphical program; and
>
> performing the specified sequence of motion control operations.

The Examiner relies on the following prior art references as evidence of unpatentability:

| | | |
|---|---|---|
| Oka | EP 0 510 514 A1 | Apr. 15, 1992 |

Parker Hannifin Corporation, "Compumotor, Motion Builder Start-Up Guide & Tutorial," 1996, pg. 1-91.

Appellants appeal the following rejection:

Claims 1-3, 5-7, 11-23, 25 and 27-48 under 35 U.S.C. § 103(a) as unpatentable over Compumotor and Oka.

Independent Claims 1, 29, 32, 35, 42 and 44 [2]

The Examiner determined that Oka cures the deficiencies of Compumotor and is relied upon to disclose automatic generation of a plurality of nodes and including nodes in a graphical program with a plurality of connections between the nodes for visually indicating functionality of the graphical program. (Ans. 4). Appellants contend that Oka relates to automatically drawing a flowchart which graphically represents the processing outline. (App. Br. 9). Therefore, according to Appellants, Oka is not in the field of Appellants' endeavor and is not reasonably pertinent to the particular problem with which the inventors are concerned. (App. Br. 10). Appellants also argue specific limitations that we address separately *infra*.

ISSUE

Did the Examiner err in by improperly combining the Compumotor and Oka references under § 103?

[2] Appellants argue all independent claims 1, 29, 32, 35, 42 and 44 as a group (App. Br. 9 *et seq.*). We select representative claim 1 to decide the appeal for this group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

FINDINGS OF FACT (FF)

1. Appellants' Specification defines a "graphical program" to include a program comprising a plurality of interconnected nodes or icons which visually indicate the functionality of the program. (Spec. 12, ll. 16-18).

2. Compumotor discloses a graphical programming tool which allows programming of products with visual icons. (Compumotor, p. 2).

3. Oka is directed to automatically draw a flow chart as a graphic representation of data processing contents.

ANALYSIS

At the outset, we observe that Appellants aver that Compumotor teaches that the user manually creates a graphical program and manually creates connections between the icons or nodes. (App. Br. 10, ¶¶2, 5). Regarding the argued limitations of automatically generating a graphical program and automatically including a plurality of nodes in the graphical program, we note that broadly providing an automatic way to replace a manual activity, which accomplishe[s] the same result, is not sufficient to distinguish over the prior art. *In re Venner*, 262 F.2d 91, 94 (CCPA 1958); *Leapfrog Enter., Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007)("Applying modern electronics to older mechanical devices has been commonplace in recent years.") An improved product in the art is obvious if that "product [is] not [one] of innovation but of ordinary skill and common sense." *KSR,* 550 U.S. 398, 421 (2007).

Moreover, Appellants do not contest the Examiner's finding (Ans. 4) that Oka discloses a plurality of nodes with *automatically generated connections between the nodes* represented as the graphical flowchart,

wherein the graphical flowchart can visually indicate functionality of the graphical program. We also note that the Examiner relied on Compumotor to teach a graphical program. (Ans. 3-4).

Regarding the Examiner's proffered combination of Compumotor and Oka, we find that each of the references relied on by the Examiner is directed to the same *general* field of endeavor as the instant invention on appeal, i.e., computer graphics. (*See* FF 1-3). Thus, we agree with the Examiner's finding that each of the cited references is analogous art to the claimed invention.[3] (Ans. 21).

Moreover, the Supreme Court has determined that the conclusion of obviousness *can* be based on the interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art, and an obviousness "analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418. *See* also *Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2006).

---

[3] "Whether a reference in the prior art is 'analogous' is a fact question." *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992) (citing *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 n.9 (Fed. Cir. 1987)). Two criteria have evolved for answering the question: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *Id.* at 658-59 (citing *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979)).

Here, it is our view that an artisan possessing common sense and creativity at the time of the invention would have been familiar with various methods of graphic programs in different types of computer network systems. (*See* FF 1-3). While we are fully aware that hindsight bias often plagues determinations of obviousness, *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966), we are also mindful that the Supreme Court has clearly stated that the "combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results," *KSR* 550 U.S. at 401.

This reasoning is applicable here. Thus, we find unavailing Appellants' contention in the Brief that because Oka is not directed to graphical programs, it is not in the field of Appellants' endeavor.

For the aforementioned reasons, we find that the Examiner did not err in the obviousness rejection of representative claim 1. Independent claims 29, 32, 35, 42 and 44 fall therewith. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants present no separate arguments for associated dependent claims 2, 3, 5-7, 11-13, 15, 18, 23, 25, 28, 30, 31, 33, 34, 36-41, 43, and 45-48. We note that arguments not made are considered waived. *See* 37 C.F.R. § 41.37(c)(1)(vii). Therefore, each of dependent claims 2, 3, 5-7, 11-13, 15, 18, 23, 25, 28, 30, 31, 33, 34, 36-41, 43, and 45-48 falls with its associated independent claim.

Dependent Claim 14

Appellants contend that the Examiner has not cited any teaching or suggestion found in the art for modifying Compumotor to perform the feature recited in claim 14. (App. Br. 16).

In response, we have fully addressed the combinability of Compumotor and Oka *supra*. Moreover, we disagree with Appellants that the Examiner is required to identify a motivation to combine the references derived from the references themselves. (App. Br. 16). "[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *In re ICON Health and Fitness Inc.*, 496 F.3d 1374, 1380 (Fed. Cir. 2007) (quoting *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 402 (2007)).

While Appellants additionally aver that "the Examiner has not even cited any prior art that teaches the feature recited in claim 14" (App. Br. 16), we note that the Examiner has set forth detailed findings for these limitations on pages 17-18 of the Answer. Appellants have failed to present substantive arguments traversing the Examiner's factual findings. Mere attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); 37 C.F.R. § 1.111(b); and *Ex parte Belinne*, No. 2009-004693, slip op. at 7-8 (BPAI Aug. 10, 2009) (informative), *available at* http://www.uspto.gov/web/offices/dcom/bpai/its/fd09004693.pdf

This reasoning is applicable here. Accordingly, we sustain the Examiner's §103 rejection of dependent claim 14.

Dependent Claim 16

Appellants contend that Compumotor does not teach the display of the motion control operations in the sequence. (App. Br. 13).

The Examiner determined that the initial sequence of motion control operations that are selected do not represent a graphical program. A graphical program is not generated until the connections are made between two of the motion control operations. (Ans. 21). The Examiner finds that the workspace in Compumotor initially displays motion control operations in a sequence. (*Id.*).

ISSUE

Under §103 did the Examiner err in determining that the cited references teach or suggest a graphical user interface which visually represents motion control operations in the sequence?

FINDINGS OF FACTS

4. Compumotor discloses a motion portion of the application that is controlled by the Second program. A second program worksheet is created in a new window. (Pg. 77-78).

ANALYSIS

Based upon our review of the record, we agree with and adopt the Examiner's findings with respect to claim 16. (*See* Ans. 21). In addition, we find that Compumotor discloses a graphical user interface (motion portion of the application) which initially displays motion control operations in a sequence, in which icons are added to the Second program worksheet. As a result, we find that the cited combination of references teaches a

graphical user interface (worksheet) which visually represents the motion control operations in the sequence (icons on the top portion of the worksheet).

Based on the record before us, we find the Examiner did not err in determining that the cited references teach or suggest a graphical user interface which visually represents motion control operations in the sequence. Accordingly, we sustain the Examiner's rejection of representative claim 16. Claim 17, not argued separately, falls therewith.[4]

Dependent Claim 19

Based upon our review of the record, we agree with and adopt the Examiner's findings with respect to claim 19. (Ans. 8). While Appellants recite the language of the dependent claim 19 (App. Br. 13), we note that a statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim. *See* 37 C.F.R. § 41.37(c)(1)(vii). Moreover, we find Appellants' mere assertion that Appellants "can find no teaching" of the disputed limitations in the Compumotor reference is not a substantive argument that traverses the Examiner's findings. (App. Br. 13). A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of MPEP § 1.111(b). Mere attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value. *Geisler*, 116 F.3d at 1470.

[4] Arguments not made are considered waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

On this record, we sustain the Examiner's rejection of dependent claim 19.

Dependent Claim 20

The Examiner determined that Compumotor discloses displaying one or more views of the sequence of motion control operations on the graphical user interface, wherein the one or more views graphically preview the cumulative movement specified by the sequence of motion control operations. (Ans. 8). Appellants contend that Compumotor merely displays the various program icons that cause the movement to be performed, i.e. displays the program icon itself. (App. Br. 14). Appellants aver that this is not the same as displaying a graphical preview of the actual movement. (*Id.*).

ISSUE

Under §103 did the Examiner err in determining that the cited references teach or suggest "graphically preview[ing] the cumulative movement specified by the sequence of motion control operations?"

FINDINGS OF FACT

5. Compumotor teaches a graphical representation of program icons that are linked together prior to being built into 6000 controller code. (Pg. 86-87; top Fig. pg. 87).

ANALYSIS

Based upon our review of the record, we agree with Appellants' arguments with respect to the rejection of claim 20. (App. Br. 14). As noted by Appellants, we find the figure of the top of page 87 (as referenced by the Examiner) merely shows icons that are in the process of being linked

together prior to forming the graphical program. (FF 5). Thus, we find that the aforementioned figure of Compumotor (pg. 87) does not fairly teach or suggest a *preview* of cumulative movement specified by the sequence of motion control operations as required by claim 20. Therefore, we find the Examiner erred in rejecting dependent claim 20. Accordingly, we reverse the Examiner's rejection of claim 20 as well as associated dependent claims 21 and 22.

Dependent Claim 27

The Examiner determined that according to Compumotor, the computer program is the controller to which the operations are downloaded for the execution of the specified sequence of motion control operations. (Ans. 9). Appellants contend that according to Compumotor, the computer program that was used to create the program requests the controller to execute the program. (App. Br. 15).

ISSUE

Under §103, did the Examiner err in determining that the cited references teach or suggest receiving a request to execute the motion control operations from a computer program that was *not* used to create the sequence of motion control operations?

FINDINGS OF FACT

6. Compumotor discloses that the program is downloaded to the controller memory. By choosing the "Run" menu communications is set up with the controller. Selecting "Run Main Program" runs the main program from the controller memory. (Pg. 90-91).

We find Compumotor teaches that the program is created via the graphical user interface, and is later downloaded to the controller where it is subsequently executed. (FF 6). We do not agree with the Examiner that because the program is downloaded to the controller memory that the execution request is from a *different* program than the one used to create the motion control operations, as required by the language of claim 27 (i.e., "wherein the computer program was not used to create the sequence of motion control operations"). To the contrary, we find that the program used to request execution and create the program are one and the same. (Compumotor). On this record, we find the Examiner erred in rejecting claim 27. Accordingly, we reverse the Examiner's rejection of claim 27.

## DECISION

We affirm the Examiner's § 103 rejection of claims 1-3, 5-7, 11-19, 23, 25, and 28-48.

We reverse the Examiner's §103 rejection of claims 20-22 and 27.

## TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

## ORDER

AFFIRMED-IN-PART

pgc

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398